

REMARKS

Claims 1-2 and 6-9 are pending. By this Amendment, the specification and drawings are amended, claims 3-5 are canceled, claims 1-2 are amended and new claims 6-9 are added.

The Office action objects to the disclosure because of informalities. In regard to the Examiner pointing out that WI lamp should be MI lamp, Applicants note that the error was in the drawing and not in the specification and, accordingly, Fig. 1 has been amended as set forth in the attached Request for Approval of Drawing Corrections to change element 1 to WI. Regarding the other informalities pointed out by the Examiner, these changes have been made to the specification and, accordingly, Applicants request withdrawal of the objection to the drawings and disclosure.

The Office action objects to claims 4 and 5 as being of improper form. Because claims 4 and 5 have been canceled, this objection is moot and Applicants request withdrawal.

The Office action rejects claims 1-8 under 35 U.S.C. § 112, second paragraph. It is respectfully submitted that the claims as amended obviate the rejections under 35 U.S.C. § 112. Withdrawal of the objections is requested.

The Office action rejects claims 1 and 3 under 35 U.S.C. § 102 over Iwasaki (US Pat. 5,825,484). The Office action also rejects claims 2, 4, and 5 under 35 U.S.C. § 103 over Iwasaki and further in view of Tohyama (US Pat. 4,227,811). These rejections are respectfully traversed.

The presently claimed invention includes digital storage means for storage of digital signals corresponding to the light of the beam, and control means for controlling voltage applied to the photo-detector, the control means being equipped with an applied voltage storage means for previously storing the applied voltage corresponding to a wavelength thereof, wherein when measuring a sample, a voltage value corresponding to said wavelength to be measured is read out from said applied voltage storage means so as to apply a voltage having said voltage value to said photo-detector. Thus, the voltage value applied to the photo-detector according to each wavelength is stored in the memory device, and when measuring a sample, the voltage value applied to the photo-detector by reading out the voltage value corresponding to the wavelength. Thus, if the wavelength has changed in a high speed, cancellation of the signal is prevented, and sensitivity correction of the photo-detector can be effectively performed.

In contrast, in Iwasaki, two control methods to prevent output current saturation of a photo-detector are shown. In the first control method, a maximum output current of an optical detector 3 to be used as previously stored, and when the output current of the optical detector is over a stored value in measuring a sample, a reverse bias voltage is applied to the optical detector 3. In a second control method, a wavelength range in which the output current saturates as previously obtained, when measuring, rotation only defraction grading 23 is stopped just out of the wavelength range and the reverse bias voltage is controlled to be applied or not to be applied to the optical detector 3. In both methods, the reverse bias voltage is controlled to be applied or not to be applied by either switching on or off the reverse bias voltage. In a case that the reverse bias voltage is switched, this reference discloses only that the output current is always fed back when the switching is performed by one stopping the rotation of the defraction grading 23.

Thus, in Iwasaki, there is no description that an applied voltage storage means stores an applied voltage corresponding to a wavelength thereof and when measuring a sample, a voltage failure corresponding to said wavelength is read out and applied to the photodetector. Further, the cited reference, Tohyama, shows only a construction of the double beam optical photometer as the background of the invention and the present invention is not obvious over Tohyama.

For at least these reasons, it is submitted the application is in condition for allowance. Withdrawal of the rejections is requested.

The Office is hereby authorized to charge any additional fees under 37 C.F.R. §1.16 or §1.17 or credit any overpayment to Deposit Account No. 11-0600.

Should the Examiner have any questions concerning this matter, he is invited to contact Applicants' undersigned attorney at 202/220-4334..

Respectfully submitted,

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FIG. 1

